electronic device **10** may identify compatible transmission bands or transmission frequencies to a transmission band or transmission frequency already assigned or allocated to the first SIM card **64**A and/or the first core network **54**A. The base station **52** may, at block **392**, determine the transmission band assignment or the transmission frequency assignment from a set of preferred transmission bands or a set of preferred transmission frequencies transmitted to the base station **52** by the electronic device **10**. Then, at block **388**, when the base station **52** communicates with the electronic device **10** using the second paging assignment, the base station **52** may also use the selected transmission band or transmission frequency when transmitting with the electronic device **10**.

[0147] Technical effects of the present disclosure include systems and methods for adjusting transmission patterns of a base station based at least in part on determined transmission patterns of a base station or parameters associated with a first SIM card. By using paging cycle assignments to control when a base station transmits or receives information from an electronic device, the electronic device reduces or eliminates a likelihood of dropped or missing data transmitted (e.g., a communication) from the base station. This is at least in part because other base stations also communicatively coupled to the electronic device use non-conflicting transmission patterns when transmitting data to the electronic device, and thus may not transmit data at a time that may conflict with an ongoing communications.

[0148] The specific embodiments described above have been shown by way of example, and it should be understood that these embodiments may be susceptible to various modifications and alternative forms. It should be further understood that the claims are not intended to be limited to the particular forms disclosed, but rather to cover all modifications, equivalents, and alternatives falling within the spirit and scope of this disclosure.

[0149] The techniques presented and claimed herein are referenced and applied to material objects and concrete examples of a practical nature that demonstrably improve the present technical field and, as such, are not abstract, intangible or purely theoretical. Further, if any claims appended to the end of this specification contain one or more elements designated as "means for [perform]ing [a function] . . . " or "step for [perform]ing [a function] . . . ", it is intended that such elements are to be interpreted under 35 U.S.C. 112(f). However, for any claims containing elements designated in any other manner, it is intended that such elements are not to be interpreted under 35 U.S.C. 112(f).

What is claimed is:

1. A method of operating an electronic device, comprising:

registering a first subscriber identification module (SIM) card to a first core network, wherein the electronic device comprises the first SIM card and a second SIM card;

registering the second SIM card to a second core network after registering the first SIM card to the first core network;

receiving a first paging cycle for the first SIM card from the first core network and a second paging cycle for the second SIM card from the second core network, the first paging cycle defining a first set of reception periods for the electronic device to receive paging data from the first core network, the second paging cycle defining a second set of reception periods for the electronic device to receive paging data from the second core network, the second paging cycle being determined based on the first paging cycle; and

communicating with the first core network using the first SIM card based on the first paging cycle and communicating with the second core network using the second SIM card based on the second paging cycle.

2. The method of claim **1**, wherein communicating with the first core network comprises determining a first time within the first paging cycle to operate first receiving circuitry operably coupled to the first SIM card to receive data from the first core network, and wherein communicating with the second core network comprises determining a second time within the second paging cycle to operate second receiving circuitry operably coupled to the second SIM card to receive data from the second core network.

3. The method of claim **2**, wherein determining the first time within the first paging cycle comprises identifying an end to a connected discontinuous receive mode (C-DRX) gap corresponding to transition between a transmission period of the first paging cycle and an idle period of the first paging cycle.

4. The method of claim **1**, comprising, in response to registering the second SIM card to the second core network, transmitting the first paging cycle to the second core network, wherein receiving the second paging cycle from the second core network occurs after the second core network uses the first paging cycle to generate the second paging cycle.

5. The method of claim **1**, wherein the second core network is configured to receive the first paging cycle from the first core network.

6. The method of claim **1**, comprising:

transmitting a preferred transmission band to the second core network after registering to the second core network; and

receiving a transmission band from the second core network in response to the second core network determining the transmission band based on the preferred transmission band, wherein communicating with the second core network is performed by using the transmission band.

7. The method of claim **6**, comprising:

selecting a transmission frequency from a plurality of transmission frequencies of the transmission band; and

communicating with the second core network using the transmission frequency.

8. The method of claim **6**, comprising:

receiving information from the first core network regarding operation of the first SIM card after registration to the first core network; and

determining the preferred transmission band based at least in part on the information from the first core network, wherein the preferred transmission band enables communication using the second core network without conflict with communications using the first core network.

9. The method of claim **1**, wherein registering the second SIM card to the second core network comprises:

activating the second SIM card after activating the first SIM card, and

in response to activating the second SIM card, registering the second SIM card to the second core network.